

WHAT IS CLAIMED IS:

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1. A mount for a powertrain component of a motor vehicle, the mount comprising:

5 a first plate connected to one of the powertrain component or a frame of the motor vehicle;

a second plate connected to the other of the powertrain component or the frame of the motor vehicle; and

10 means for adjusting damping characteristics of the mount as a function of the capacitance between the first plate and the second plate.

2. The mount of claim 1 wherein the means for adjusting damping characteristics comprises a controller connected to the first and second plates.

15 3. The mount of claim 1 wherein the means for adjusting damping characteristics comprises a capacitance-to-voltage device connected to the first and second plates.

20 4. The mount of claim 1 wherein the first plate is fixed relative to the one of the powertrain component or the frame of the motor vehicle.

5. The mount of claim 4 wherein the second plate is fixed relative to the other of the powertrain component or the frame of the motor vehicle.

25 6. The mount of claim 1 wherein the means for adjusting damping characteristics comprises means for adjusting damping characteristics of the mount as a function of the change in capacitance between the first plate and the second plate.

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7. The mount of claim 1 wherein the powertrain component comprises an engine of the motor vehicle.

5 8. The mount of claim 1 wherein the first plate is positively charged.

9. The mount of claim 1 wherein the second plate is negatively charged.

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10. A mount for a powertrain component of a motor vehicle, the mount comprising:

a first plate connected to one of the powertrain component or a frame of the motor vehicle;

a second plate connected to the other of the powertrain component or the frame of the motor vehicle; and

a controller connected to the first plate and to the second plate, the controller generating a signal indicative of the capacitance between the first plate and the second plate.

11. The mount of claim 10 wherein the controller is operative to change damping characteristics of the mount in response to relative movement of the plates.

12. The mount of claim 10 wherein the first plate is fixed relative to the one of the powertrain component or the frame of the motor vehicle.

13. The mount of claim 12 wherein the second plate is fixed relative to the other of the powertrain component or the frame of the motor vehicle.

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14. The mount of claim 10 wherein the controller measures the change in capacitance between the first plate and the second plate.

5 15. The mount of claim 10 further comprising:
a capacitance-to-voltage device connected to the first and second plates and connected to the controller.

10 16. The mount of claim 10 wherein the powertrain component comprises an engine of the motor vehicle.

17. The mount of claim 10 wherein the first plate is positively charged.

18. The mount of claim 10 wherein the second plate is negatively charged.

15 19. A system for controlling the damping characteristics of a motor vehicle powertrain mount, the system comprising:

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a first, positively charged plate fixed relative to one of the powertrain component or a frame of the motor vehicle;

20 a second, negatively charged plate fixed relative to the other of the powertrain component or the frame of the motor vehicle; and

25 a controller connected to the first plate and to the second plate, the controller adjusting the damping characteristics of the mount as a function of the capacitance between the first and second plates.

20. The mount of claim 19 wherein the controller adjusts the damping characteristics of the mounts as a function of the change in capacitance between the first plate and the second plate.